

Comments to ET Docket 04-37
FCC Notice of Proposed Rule Making BPL Proceeding
BROADBAND OVER POWER LINE

To: Federal Communications Commission, Washington D.C. — April 30, 2004

Sirs,

I share the concerns of the radio amateur community with regard to widespread adoption of Broadband over Power Line (BPL) that is not conditional on significant progress in mitigation of electromagnetic pollution. In addition to supporting their many legitimate concerns about BPL, which can be found on the ARRL website, I would like to add some additional concerns related to geophysical research.

We owe much of what we know about the Earth's upper atmospheric layers to radio studies, especially those in the frequency range 1-80 MHz which will be affected by BPL. Although the broad structure of the upper atmosphere is understood, we still have much to learn about the variability of the upper atmosphere and the smaller scale features that affect technologies such as GPS accuracy and satellite and ground based communications. In this regard, the area we need to study most intensely, the upper atmosphere over North America, is precisely the region in which radio investigations will be severely impacted by adoption of BPL. In addition to active radio probing of the upper atmosphere, studies of the natural background have much to tell us about the Earth's radio environment, and these studies will be hampered most severely by widespread adoption of unmitigated BPL.

I urge a cautious approach toward adoption of BPL, putting foremost priority on development and implementation of mitigation techniques, in order to retain our capability as a nation to monitor and study the upper atmosphere environment of North America. This capability will be more critically needed in the years ahead as we become more dependent on technologies such as GPS.

My concern for scientific research of course dovetails with the many concerns expressed by the amateur radio community and other users of the 1-80 MHz spectrum relating to national security, etc. Avoiding deliberate impairment of the shortwave services within the United States should rank among the FCC's highest priorities.

Sincerely Yours,

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